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**UNITED STATES PATENT AND TRADEMARK OFFICE**

**Examiner:** M. Moskowitz

**Art Unit:** 3663

**In re:**

**Applicant:** PAKHOMOV

**Serial No.:** 10/659,332

**Filed:** 09/11/2003

**AMENDMENT**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, Virginia

Sir:

This communication is responsive to the Office Action of May 25,

2004.

This is to certify that  
this communication  
was deposited with the  
Postal Service 1<sup>st</sup> class  
addressed to Commissioner for Patents  
at Alexandria P.O. Box 1450  
Alexandria, VA 22313-1450  
on September 25, 2004

*[Signature]*

In the Office Action the Examiner again applied the references which he applied in the previous Office Action namely the patents to Tanaka or Enomoto as being obvious over these references.

The Examiner indicated that the casing of the transducer must be non-conductive and the particles must be conductive and asked the applicant whether he would not argue to the contrary.

Definitely, applicant does not argue to the contrary. It is true that the casing must be non-conductive and the particles must be conductive. However, the references do not teach the new features of the present invention and does not provide any hint and suggestions about these new features.

The Examiner further presented some strange arguments which did nothing to enhance his attempts to show that the present invention can be obvious. He said that the types of problems encountered in the art involved certain equipment in how to provide an inexpensive, accurate and reliable signals, the innovations in the field have been very fast, prior art solutions include colloidal transducers and perimeter monitoring with acoustic transducers, and then he said that the use of treated particles and non-conductive containers would have been obvious to one skilled in the art for

therefore said reasons. Applicant sees absolutely no logic in this set of the Examiner's statements.

Claim 17, the broadest claim on file, defines a device for sensing seismic and/or acoustic vibrations with a body of a particulate material and means for determining changes in its electrical conductivity caused by seismic and acoustic vibrations, wherein the particles are treated with an electrically conductive substance. None of the references discovered by the Examiner, none of his statements about generally conventional prior art, none of his logical conclusions can change the fact that the articles treated with an electrically conductive substance have never been known before, have never been disclosed in any patents of applications, and have never been used. Thus, the features of claim 17 can not be considered as obvious, since there is no hint or suggestion in any piece of the prior art that the particles treated with an electrically conductive substance are disclosed in the prior art, can be provided in the prior art, must be provided in the prior art, or can be somehow derived from the prior art. The features of claims 17 clearly and patentably distinguish the present invention from the references applied by the Examiner as well as from his hypothetical conclusions about conventional art.

Claims 18 and 19 defines two additional modifications, in particular the particles which are not electrically conductive but are treated with electrically conductive substance to become conductive, or the particles which are initially electrically conductive and are additionally treated with an electrically conductive substance to enhance their electrically conductive properties.

The new features of the present invention as defined in claims 18 and 19 are also not disclosed in any prior art, can not be derived from any prior art, and therefore can not be considered as obvious from the prior art.

These features provide significant, various possibilities of the use of corresponding particles, which could satisfy the specific requirements in special devices, as well as satisfy the specific demands of manufacturing processes of such particles. The devices defined in claims 18 and 19 define two different structural modifications, they are not disclosed in the prior art, and they can not be derived from the prior art as a matter of obviousness.

The Examiner in this application retires from the U.S. Patent and Trademark Office. A new Examiner which will be assigned to examine this application is respectfully requested to thoroughly examine the arguments presented in this Amendment, and either allow the present application with all

claims currently on file or to define a specific prior art in which the features of claims 17, 18, 19 are either disclosed or which provide any hint or suggestion that such features can be derived from the references as a matter of obviousness. In the absence of discovery of such a prior art, claims 17, 18, and 19 should be considered as patentably distinguishing over the art and should be allowed. The Examiner also respectfully requested to telephone the undersigned and to discuss this case.

Reconsideration and allowance of the present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, he is invited to telephone the undersigned (at 631-243-3818).

Respectfully submitted,

Ilya Zborovskiy